Impact and Evaluation of AB705: Mixed-Methods Model

Mt. San Antonio College

Members of Research & Institutional Effectiveness:
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Overview

● The research studies and evaluations we will cover:
  ◦ The Implementation and Impact of the Assessment Questionnaire (AQ)
  ◦ Student and Faculty Perception of the AQ

● Today's main focus:
  ◦ Review of the methodological choices made at Mt. San Antonio College in reference to the two studies we will cover
  ◦ Lessons learned
Activity #1 (5 minutes)

Work with your neighbor to decide if these are myths or facts about AB705 mandates and guidelines. Be ready to vote individually.

- Evidence suggests a student’s high school performance is a much stronger predictor of success in transfer-level courses rather than standardized tests.
- AB705 requires that a community college maximize the probability that a student will enter and complete transfer-level coursework in English and math within a one year timeframe.
- AB705 requires that community colleges must use high school coursework and high school grades and high school grade point average in the placement of students into English and math courses.
- Colleges are required to fully implement the requirements of AB705 by fall 2019 for English, mathematics and ESL.
- Beginning in fall 2019, College can no longer use placement tests to place students into English and math courses, even for nontraditional students.
RIE Supporting the Multiple Measures Project

- Explore High School Data Source
- Placement Projection
- IT and RIE collaboration on AQ Development
- AQ Updates
- Measuring AQ Impacts
Assessment Questionnaire (AQ)

Research and IT Collaboration on the Development of Assessment Questionnaire

Pre-implementation
- Ensure quality essential questions in AQ
- Translate placement rules to programming friendly format
- Test logistics
- Perform placement validation
- Collect feedback from pilot testing

Implementation
- Install data validation process
- Monitor emerging issues
- Ensure AQ data store and access
- Report out weekly updates on AQ usage and placement distribution

Post-implementation
- Continue verifying data integrity
- Create Argos dashboard/reports
- Create AQ data element dictionary
- Collect feedback on AQ from students, faculty, staff
Multiple Measures Project Timeline

- **August, 2017**
  - English and Math Faculty Vote

- **October, 2017**
  - Cabinet review and decision to create own instrument
  - First Campus Leaders Planning Meeting

- **November, 2017**
  - Second Campus Leaders Planning Meeting
  - First “demo” of the AQ

- **December, 2017**
  - Board of Trustees Presentation

- **February, 2018**
  - Core Group timelines and follow-up assignments
  - Management Team Update

- **March, 2018**
  - Campus-wide Update Meeting
  - Naming and piloting of the AQ

- **April 2, 2018**
  - “Go Live”
  - Student Services Team Update

- **May, 2018**
  - Summer Session Registration

- **June, 2018**
  - Core Group Review Meeting

- **September, 2018**
  - Core Group Review Meeting
  - Next Phase Planning
AQ Data Summary
[as of March 26, 2019]

- A total of 20,818 students completed the AQ:
  - 55% are continuing students
  - 38% are first-time students
  - 83% were placed into transfer level English course
  - 38% were placed into transfer level math courses
- Female AQ completers were more likely to place into transfer level courses
- African Americans and Latinos were less likely to place into transfer level math courses
Changes in Transfer Level English and Math Placement Rates

![Bar Chart]

Changes in Transfer Level English and Math Placement Rates

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>ENGL1A</td>
<td>22%</td>
<td>83%</td>
</tr>
<tr>
<td>MATH100s</td>
<td>19%</td>
<td>38%</td>
</tr>
</tbody>
</table>
Initial Impact of Multiple Measures Assessment and Placement – Fall 2018 Course Success Rates

- Students placed into transfer level English courses (English 1A) directly by their high school credentials were highly successful in completing the course (67%) compared to the overall average success rate in prior years (60%).

- Mixed results were found on math course success rates with students placed into transfer level math courses directly by their high school credentials.
Activity #2 (10 minutes)

- Consider what you’ve learned about Mt. SAC’s math and English placement changes:
  1. What are your research question(s)?
  2. What would your mixed methods (qualitative and quantitative) design include?

- Limitations to your study:
  - 2 weeks to design and implement
  - Have 4 weeks to collect data
  - 2 months to analyze all your data
Purpose of the Mixed Methods Study:

To gather feedback from students and faculty about the AQ during fall 2018, with a focus on placement (English & math) perception.

Additional questions focused on:
- Tutoring
- Campus interactions
- Self-efficacy
Data Collection

Time Period:
November 2018 to December 2018

Survey:
● **9,232** students invited to participate in survey
● Survey Sample Size **N=954**

Focus Groups:
● **5** Student Focus Groups (Math); **3** Class Pop-in Focus Groups (English); **2** Math Faculty Focus Groups; **1** English Faculty Focus Group
  ◦ **37** Students in all Focus Groups
  ◦ **30** Students in Class Pop-ins
  ◦ **25** Faculty Members in Focus Groups
Survey Sample-Gender

- **9,232** students were invited
  - 10% of students completed the survey \((n = 954)\)
  - +/- 3% margin of error
- Demographic features between those invited, those that completed the survey, and the entire campus were fairly similar, excluding gender.

<table>
<thead>
<tr>
<th>Survey Completers</th>
<th>Students Invited</th>
<th>Mt. SAC Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female: 65%</td>
<td>Female: 51%</td>
<td>Female: 54%</td>
</tr>
<tr>
<td>Males: 34%</td>
<td>Males: 47%</td>
<td>Males: 43%</td>
</tr>
<tr>
<td>Unknown: 2%</td>
<td>Unknown: 2%</td>
<td>Unknown: 3%</td>
</tr>
</tbody>
</table>

Data Source: CCCCO Data Mart, 2/26/2019
## Survey Sample-Race/Ethnicity

<table>
<thead>
<tr>
<th>Survey Completers</th>
<th>Students Invited</th>
<th>Mt. SAC Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American: 3% African-American: 4% African-American: 3%</td>
<td>American Indian/ American Indian/ American Indian/Alaskan Native: .15%</td>
<td>American Indian/ Alaskan Native: 0%</td>
</tr>
<tr>
<td>Asian: 20% Asian: 16% Asian: 18%</td>
<td>Asian: 0% Asian: 16% Asian: 0%</td>
<td>Asian: 20% Asian: 16% Asian: 18%</td>
</tr>
<tr>
<td>Latino/a: 62% Latino/a: 67% Latino/a: 56%</td>
<td>Latino/a: 62% Latino/a: 67% Latino/a: 56%</td>
<td>Latino/a: 62% Latino/a: 67% Latino/a: 56%</td>
</tr>
<tr>
<td>Two or More Races: 2% Two or More Races: 3% Two or More Races: 2%</td>
<td>Two or More Races: 2% Two or More Races: 3% Two or More Races: 3%</td>
<td>Two or More Races: 2% Two or More Races: 3% Two or More Races: 3%</td>
</tr>
<tr>
<td>Pacific Islander: 0% Pacific Islander: 0% Pacific Islander: .21%</td>
<td>Pacific Islander: 0% Pacific Islander: 0% Pacific Islander: .21%</td>
<td>Pacific Islander: 0% Pacific Islander: 0% Pacific Islander: .21%</td>
</tr>
<tr>
<td>Unknown: 1% Unknown: 0% Unknown: 7%</td>
<td>Unknown: 1% Unknown: 0% Unknown: 7%</td>
<td>Unknown: 1% Unknown: 0% Unknown: 7%</td>
</tr>
</tbody>
</table>

Data Source: CCCCO Data Mart, 2/26/2019
Activity #3 (10-15 minutes)

The Equity Lens

● How can equity always be infused in your research projects?

● Outside of Student Equity funding, how do programs and departments examine equity at your campus?

● On your campus, is equity a thing, or is it a THING?
Preliminary Focus Group Results

Students
- Appreciate options, but will self-assess to lower course if in doubt.
- Want more robust tutoring.
- Co-requisite courses need refining.
- Overall, students positive about their experience.
- English placement felt more accurate than math.

Faculty
- Concerns about maturity levels.
- Funding formula may create pressure to pass students.
- Student preparation for transfer level math & English.
- A or B vs failure; less middle.
- Student referral process needs improvement.
Activity #4 (6 minutes)

Work with a partner to critique the Mt. SAC Research Action Plan:

1. What do you like?
2. What do you not like?
3. What would you recommend be changed/ improved?
4. How does this align with your College’s Research Action Plan?
Campus Reaction

THIRSTY
Limitations

● **Operational**
  ● **Time** - short window of opportunity
  ● **Parameters** - Changing placements
  ● **Project Planning** was impacted by other project commitments.

● **Methodological**
  ● **Survey** length and response choices
  ● Expand to **other disciplines**
  ● **Descriptive Analyses** could be expanded to correlation, factor analyses
  ● **Diversity** of focus roups
Next Steps

- Research Action Plan
- Repeat mixed methods….
- Visual representation of data
Preliminary Focus Group results

Assessment Questionnaire (AQ) Impact Project

The general purpose of the project was to gather feedback from students and faculty about the AQ during fall 2018, with a focus on placement (English & math) perception. Additional questions focused on tutoring, campus interactions, and self-efficacy.

**METHODS**

This project used a mixed methods design (qualitative & quantitative) to assess the impact of the AQ.

**POPULATION**

- English and math faculty
- Students enrolled in English and math
- Students who have taken the AQ

**COLLECTION**

- 5 Student Focus Groups
- 3 Class Pop-in Focus Groups
- 2 Math Faculty Focus Groups
- 1 English Faculty Focus Group
- Student Survey (Online)

**RESULTS**

- 39 Students in Focus Groups
- 35 Students in Class Pop-ins
- 25 Faculty Members in Focus Groups
- 690+ Survey Responses

**PRELIMINARY FINDINGS**

**From Faculty**

- Previously, prerequisite courses impeded students from taking transfer level math or English, however, faculty have noted concerns over student’s maturity.
- There is a greater divide between the successful students and the failing students. Either students are doing well or they are failing the course.
- Student preparedness negatively impacted by AQ placement.
- Professional development is needed on divergent levels of student preparedness, and new strategies to help students achieve successful outcomes.
- The support systems (tutoring and co-requisites) need to be aligned better with courses in order to improve student success and retention.
- Concern about the relationship between the funding formula and pressure on course success rates.
- Student referral to tutoring is often informal, which makes it difficult to follow up with students about their attendance and impact of tutoring.
- Tutor quality, they are often one to two levels above the students they help. Once they become good at their job, they transfer or get a higher paying job.

**From Students**

- Students like the option for higher placement provided by the AQ, but they are willing to place themselves in a lower placement based on uncertainty.
- Some Pre-AQ and AQ students did not understand the connection between initial placement and length of time in college.
- More robust counseling; there is not enough time for in depth conversation about future career and educational exploration.
- Students’ usage of tutors seemed to be utilized with more students in higher-level courses.
- Having a tutor embedded in the class was both useful and convenient.
- Conversely, some students saw their co-requisite class as a study “hour.”
- Students felt that their placement was more accurate for English than Math.
- Overall, students were positive about their courses, and interactions with faculty.
- Some students expressed that they did not attend tutoring due to work schedule, and limited time offered for one on one tutoring (it felt rushed).

*Please note that the findings discussed here are not the final conclusions of the RRE team. Data analysis is still underway and results are subject to change.

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